

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-07-30  
**Investment Auto Submission Date:** 2012-02-29  
**Date of Last Investment Detail Update:** 2012-02-24  
**Date of Last Exhibit 300A Update:** 2012-08-22  
**Date of Last Revision:** 2012-08-22

**Agency:** 024 - Department of Homeland Security

**Bureau:** 60 - United States Coast Guard

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** USCG - Rescue 21

**2. Unique Investment Identifier (Ull):** 024-000006079

#### Section B: Investment Detail

- Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

Rescue 21 (R21) is the U.S. Coast Guard's (CG) advanced command, control, and communications system for missions in the coastal zone. R21 was developed to better locate mariners in distress and save lives and property at sea and on navigable rivers. This system is replacing the legacy National Distress and Response System in use since the 1970's. R21 system components include radio transceivers, towers for antennas, operator consoles, data servers, and interconnecting networks. Commanders and watch-standers benefit from the capabilities that R21 provides in helping to ensure the successful outcome of Search and Rescue missions. These capabilities include: Advanced Direction Finding (DF) which more accurately identifies the location of callers with lines of bearing to the VHF radio transmission source which reduces response time and search area; Continuous, enhanced VHF-FM marine radio coverage out to 20 nautical miles from shore; The ability to identify suspected 'hoax' calls, eliminating unnecessary response actions and conserving resources; Increasing the number of voice channels from 1 to 5, and protected (secure) communications for homeland security missions; Digital voice recording with immediate playback, which improves the ability to review and resolve garbled or unclear transmissions; Timely flow of information between the CG and other government and law enforcement agencies, and communications with mariners; and providing Digital Selective Calling (DSC) capability to meet the international Global Maritime Distress and Safety System requirements for Sea Area

1. With increased communications coverage, advanced DF and DSC capabilities, R21 significantly enhances the CG's ability to detect and respond to distress calls in the coastal zone, which directly benefits the U.S. public's marine safety and save lives. To date, R21 has been used in more than 30,000 SAR cases. In FY2012, the R21 Production Contractor System Design will be deployed to the 32 Sectors/Groups under contract with the production contractor providing a total of 41,871 miles of costal coverage, encompassing the continental United States, Great Lakes, Hawaii, Guam, Puerto Rico, and the U.S. Virgin Islands. In the Western Rivers Sectors the system will have begun low rate initial production at select sites in the first of three Sectors. In Alaska, initial design work on a new console and DSC system will continue. Completion of R21 is not dependent upon other projects.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The Rescue 21 Project eliminates many existing communication coverage gaps ("dead zones") while ensuring continuous, enhanced VHF-FM marine radio coverage out to 20 nautical miles from shore within the coastal zone. The system provides digital voice recording capability with immediate playback to resolve unclear transmissions, which is a critical function to support search and rescue planning and response asset management. The system also provides improved direction finding capability for more timely response to mariners in distress and an ability to distinguish "hoax" calls from actual distress calls, which helps avoid unnecessary costs and risks to response crews and assets. The system provides additional voice communications channels to allow watchstanders to conduct multiple operations including protected (secure) communications for homeland security missions. The system enhances Maritime Domain Awareness (MDA) by maintaining communications with mariners and facilitating the timely flow of information between the Coast Guard and other government and law enforcement agencies. Finally, the system provides Digital Selective Calling (DSC) capability to meet the international Global Maritime Distress and Safety System (GMDSS) requirements for Sea Area 1 per the Safety of Life at Sea (SOLAS) treaty. Failure to fully fund the Rescue 21 Project will impact the Coast Guard's ability to fully execute its missions in the Alaska region. The continuous VHF-FM marine radio and DSC capabilities are critical to the timely receipt of mariner's distress calls and deployment and direction of response assets. Legacy VHF-FM communications capabilities are near the end of their service life and must be recapitalized, and the addition of DSC is required for SOLAS treaty compliance.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

The Rescue 21 (R21) program has acceptance milestones which mark accomplishments achieved by the project. The Conditional Acceptance (CA) milestone signifies beneficial use and completion of the deployment of the R21 system in a Sector. R21 has already CA two Sectors in FY2012: Lake Michigan 01Dec 2011 and San Juan 31Jan 2012. In FY2012, CA will occur in 2 remaining Sectors: Honolulu 02Apr2012 and Guam 28Jun2012, adding Rescue 21 coverage to a total of 3,190 miles of U.S. coastline amongst the 4 Sectors. Final Acceptance (FA) occurs when removal of the legacy system has been completed and the R21 system is completely transition to the System Support & Maintenance organization. In

FY2012 R21 will complete FA in 15 Sectors. For both the Western Rivers (WR) and Alaska (AK) projects Systems Engineering Life Cycle documentation was prepared, system specifications were updated to meet Sponsor requirements, and deployment planning for the respective systems was conducted.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

By the end of FY2012, the Rescue 21 system will be fully deployed in 32 Sectors, providing a total of 41,871 miles of coastal coverage. Rescue 21 coverage will encompass the continental United States, Great Lakes, Hawaii, Guam, Puerto Rico, and the U.S. Virgin Islands. In FY2012, Rescue 21 has Conditionally Accepted two Sectors: • Lake Michigan on 01 Dec 2011 • San Juan on 31 Jan 2012 Rescue 21 also plans to Conditionally Accepted the following two Sectors in FY2012: • Honolulu on 02 Apr 2012 • Guam on 28 Jun 2012 Additionally, in FY2012 Rescue 21 plans to complete Final Acceptance of 15 Sectors: • Northern New England • Boston • North Carolina • Miami • Key West • Los Angeles/Long Beach • Astoria • Sault Ste Marie • Lake Michigan • Buffalo • Corpus Christi • San Fran • San Juan • Honolulu • Guam FY 2013 Activities include Delivery Order Closeout of Sectors Guam, Honolulu, and San Juan. Additionally, required operating system and hardware upgrades to accommodate Windows 7 and Server 2008 will be conducted. With regards to Rescue 21 Western Rivers, by the end of FY2012 the system will have selected the radio control console system, finalized the system design and demonstrated an operational baseline. The system will have begun low rate initial production at select sites in Sector Ohio River Valley. FY2013 activities will continue deployment in Sector Ohio River Valley and begin deployment in Sectors Upper and Lower Mississippi Rivers. Planned Alaska activities in FY 2012 include System Design Reviews, Preliminary Design Reviews, and Critical Design Reviews for the Console, DSC, and power design components. FY2013 activities will continue Development, Integration & Test, and Implementation phases for the Consoles, DSC, and power systems.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2011-05-23

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$30.5	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$718.4	\$35.9	\$65.0	\$0.0
DME (Including Planning) Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.0
Sub-Total DME (Including Govt. FTE):	\$748.9	\$35.9	\$65.0	0
O & M Costs:	\$137.5	\$65.2	\$78.8	\$78.8
O & M Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.0
Sub-Total O & M Costs (Including Govt. FTE):	\$137.5	\$65.2	\$78.8	\$78.8
Total Cost (Including Govt. FTE):	\$886.4	\$101.1	\$143.8	\$78.8
Total Govt. FTE costs:	0	0	0	0
# of FTE rep by costs:	0	0	0	0
Total change from prior year final President's Budget (\$)		\$-0.1	\$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

There are no fundamental or substantive changes.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	7008	Production contract	DTCG2302DND RS02	6950							
Awarded	7008	HSCG2312FAN S0337	HSCG2306AAN D004	7008							
Awarded	7008	<a href="#">DTCG2303AA NB011</a>	GS10F0105K	4730							
Awarded	7008	Tower Leases (ACI)									
Awarded	7008	System Support & Maintenance									
Awarded	7008	Tower Leases (OE)									
Awarded	7008	Circuits, Networks & Spectrum									
Awarded	7008	<a href="#">HSCG2312FA NS037</a>	HSCG2306AAN D004	7008							

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

The Coast Guard ensured EVM requirements were included in the Rescue 21 Phase II Indefinite Delivery, Indefinite Quantity (IDIQ) contract with the prime contractor, General Dynamics C4 Systems (item #1 above). The total value of the acquisition phase of this contract is \$643.385M. The time and material contracts/task orders listed above are for various project management contract support tasks (project management, financial management, and computer database support) for the Rescue 21 project office at Coast Guard Headquarters and the Rescue 21 Project Resident Offices in Scottsdale, AZ and Juneau, AK. The contracts listed for Western Rivers, Vessels, and Alaska Deployment have not yet been awarded but there will not be a prime production contractor for these aspects of the Rescue 21 system. The Coast Guard will be purchasing equipment and deploying the system via multiple small contractors. EVM requirements are not included in these contracts. DOD discourages the use of EV on these types of contracts and DHS allows for PM discretion to use EV for Firm Fixed Price, Time and Materials, and or level of effort contracts.



## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-07-30

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
1	Project Management	Contractor PM for CLINs 0001H, 0001, and 1001; Coast Guard Costs for Project Residence Offices in Scottsdale, AZ and Alaska; CG-9 Contribution; Travel, training, misc.; Costs for Support Contractors and MIPRs to SPAWAR & OGA supporting Project activities.			
2	Engineering	Engineering efforts for Block Upgrade and HSI5; Contractor System Design Maintenance and Transition Support CLINS 00006, 00007 and 10006; NRE Operating System Upgrade and Active Directory, R21 OS Upgrade Retrofit (CLIN 0030).			
3	System Support and Maintenance	System Support and Maintenance for the R21 Systems in Accepted Sectors. Includes preventive and corrective maintenance, system monitoring, network support, and spares; Contractor SS&M CLINs 00002, 00003, 00004, 00005, 00008, 10002, 10003, 10004,			



Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
		10005, 10007, 10008.			
4	Rescue 21 Deployment	System Deployment work in remaining Sectors Key West, Miami, and Astoria, and Sections Carolinas, New England, Northern California, Southern California, Great Lakes, and Islands; Costs to establish and maintain circuits, network, and spectrum (AC&I).			
5	VSAT AC&I	Improve Operational Availability by adding satellite backup to Wide Area Network terrestrial circuits.			
6	R21 Western Rivers	Deploy R21 WR system to Sectors Upper Mississippi, Lower Mississippi, and Ohio River Valley.			
7	R21 Alaska	Planning, Testing, and Deployment of Console and DSC system in Alaska.			
8	Vessels	R21 contribution to deploy UHF capability to Small Boats and Vessels.			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
1	Project Management							
2	Engineering							
3	System Support and Maintenance							
4	Rescue 21 Deployment							

## Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
5	VSAT AC&I							
6	R21 Western Rivers							
7	R21 Alaska							
8	Vessels							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
2	(AC&I) Contractor Engineering under Legacy Contract	Engineering efforts for Block Upgrade and HSI 5	2011-12-31	2011-12-31	2011-12-31	517	0	0.00%
1	Project Organizational Support - FY12 Q1	Costs for Q1	2011-12-31	2011-12-31	2011-12-31	91	0	0.00%
1	Project Technical and Acquisition Management Support - FY12 Q1	Costs for Q1	2011-12-31	2011-12-31	2011-12-31	91	0	0.00%
1	(AC&I) Program Management Support under Legacy Contract	Project Management	2012-02-29	2012-03-31	2012-03-31	516	-31	-6.01%
3	FY12 Q2	Emergency Equipment Maintenance - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
1	FY12 Q2	Contractor Project Management Support - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
2	FY12 Q2	System Design and Maintenance - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
3	FY12 Q2	Disaster Recovery Deployment - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
1	Project Organizational Support - FY12 Q2	Costs for Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
3	FY12 Q2	Engineering Escalation - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
3	FY12 Q2	Transition Support - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
3	FY12 Q2	System Support and Maintenance - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
1	Project Technical and Acquisition Management Support - FY12 Q2	Costs for Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
3	FY12 Q2	Sustainment Engineering - FY12 Q2	2012-03-31	2012-03-31	2012-03-31	90	0	0.00%
7	R21-AK SELC Requirements Definition	System Definition Review	2012-04-27	2012-04-27	2012-04-27	574	0	0.00%
3	FY12 Q3	Sustainment Engineering - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
3	FY12 Q3	Emergency Equipment Maintenance - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
1	FY12 Q3	Contractor Project Management Support - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
2	FY12 Q3	System Design and Maintenance - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
3	FY12 Q3	Disaster Recovery Deployment - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
1	Project Organizational Support - FY12 Q3	Costs for Q3	2012-06-30	2012-06-30		90	-62	-68.89%

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
3	FY12 Q3	Engineering Escalation - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
3	FY12 Q3	Transition Support - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
3	FY12 Q3	System Support and Maintenance - FY12 Q3	2012-06-30	2012-06-30		90	-62	-68.89%
1	Project Technical and Acquisition Management Support - FY12 Q3	Costs for Q3	2012-06-30	2012-06-30		90	-62	-68.89%
1	Project Technical and Acquisition Management Support - FY12 Q4	Costs for Q4	2012-09-30	2012-09-30		91	0	0.00%
3	FY12 Q4	Disaster Recovery Deployment - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
1	FY12 Q4	Contractor Project Management Support - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
3	FY12 Q4	Engineering Escalation - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
2	FY12 Q4	System Design and Maintenance - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
1	Project Organizational Support - FY12 Q4	Costs for Q4	2012-09-30	2012-09-30		91	0	0.00%
3	FY12 Q4	Transition Support - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
3	FY12 Q4	System Support and Maintenance - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
3	FY12 Q4	Sustainment Engineering - FY12 Q4	2012-09-30	2012-09-30		91	0	0.00%
3	FY12 Q4	Emergency	2012-09-30	2012-09-30		91	0	0.00%

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
		Equipment Maintenance - FY12 Q4						
4	Section Southern California	Deployment of Sectors Los Angeles/Long Beach and San Diego	2014-09-30	2014-09-30		2,664	0	0.00%

## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Channel 16 (International Hailing and Distress Frequency) Availability of Coast Guard's Distress System	Percent	Technology - Reliability and Availability	Over target	0.995000	0.995000	0.995000	0.995000	Monthly
Channel 70 (DSC) Channel 70 (International Digital Selective Calling Reserved Channel) Availability of Coast Guard Distress System	Percent	Technology - Reliability and Availability	Over target	0.990000	0.990000	1.000000	0.990000	Semi-Annual
Provide 3 simultaneous voice communication channels	Percent	Customer Results - Customer Benefit	Over target	0.990000	0.990000	1.000000	0.990000	Semi-Annual
Provide 90% Communication Area Coverage Out to 20 Nautical Miles from Shore	Percent	Technology - Effectiveness	Over target	0.900000	0.900000	0.900000	0.900000	Semi-Annual
Percent of Coast Guard marine information broadcasts transmitted by Rescue 21 in all sectors in which Rescue 21 is deployed	Percent	Process and Activities - Cycle Time and Timeliness	Over target	0.980000	0.980000	1.000000	0.980000	Semi-Annual
Provide uninterrupted guard to receive distress and emergency alerts on	Percent	Customer Results - Service Coverage	Over target	0.980000	0.980000	99.500000	0.980000	Semi-Annual

Table II.C.1 Performance Metrics								
Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
VHF channel 16 and channel 70.								
Number of Search and Rescue Cases in which the Rescue 21 system was used	Number	Customer Results - Customer Benefit	Over target	0.000000	0.000000	23149.000000	0.000000	Monthly